

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/000702

International filing date (day/month/year)
25.01.2005

Priority date (day/month/year)
26.01.2004

International Patent Classification (IPC) or both national classification and IPC
B29C49/00, B32B27/36

Applicant
ARKEMA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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10/28/2005
10/28/2005

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000702

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/000702

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2005/000702**Re Item V**

1. Document FR-A-2806734 (D1) is the closest state of the art for the present application. D1 discloses a coextrusion binder or tie material (cf. claim 1 of D1) which can be used for producing by coextrusion blow-moulding (cf. page 2, line 6-8) a multilayer structure in which the layer formed by the tie material is directly in contact on one side with a polymer selected from a short list comprising EVOH and polyester resins (cf. claim 6 of D1) and on the other side with a polymer selected from the same list (cf. claim 7 of D1). D1 additionally discloses that the polyester can be a mixture of different polyesters (cf. page 7, line 27-30). Due to the tendency of polyesters to transesterify, D1 implicitly discloses that the polyester resins comprise also copolyesters.

The process of claim 1 differs from D1 at least in that the copolyester is glycolised. As there are no comparative examples from which the effect of the selection of a glycolised polyester could be established, the problem solved is seen as to find an alternative process for manufacturing a transparent article with gas-barrier properties. The skilled person would not find in D1 or in any other piece of the available prior art a hint to the above mentioned selection. Therefore the subject matter of claim 1 is considered to meet the requirements of Art. 33 PCT.

2. It is considered that D1 discloses a multilayer structure comprising one layer of coextrusion tie material as described in claim 4 of the present application (cf. claim 1 of D1) because all the numerical ranges mentioned in D1 are the same or overlap those of claim 4 and the melt index of the polyethylene homopolymer or copolymer (B), although not mentioned, is regarded as implicitly disclosed due to the broadness of the claimed range. As already discussed in point 1 above, D1 further discloses that the coextrusion tie material is in contact with a layer of copolyester. The multilayer structure of claim 4 differs from D1 for the fact that the copolyester is glycolised. Therefore, for the same reasons as above, also the subject matter of this claim is considered to fulfil the requirements of Art. 33 PCT.

3. Claims 2-3 and 5-9 are dependent respectively upon claim 1 or 4 and, as such, also meet the requirements of the PCT with respect to novelty and inventive step.